

Human Ecology: Following Nature's Lead, by Frederick Steiner. Washington, DC: Island Press. 2002. 256 pages. \$25.00 (cloth).

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For Frederick Steiner, *Human Ecology* is clearly a personal book. It is part travelogue, part scholarly prose, and part journal. The subtitle is *Following Nature's Lead*, which it does, but the reader is "following Steiner's lead." His approach in examining the relevancy of human ecology to planning and design is not to tell us what to do or how to do it; instead, he takes us on a journey of discovery that leaves us to continue making our own discoveries. The narrative style, comprehensive review of relevant literature, and generous endnotes make this not only a joy to read but also a trove of scholarly references enticing the reader to explore further.

There are essentially two parts to the book: the first part consists of two introductory chapters that establish the analytic "lens" for the book, and the second part consists of six chapters that examine human ecology from the household to global level.

In the introductory chapters ("Introduction" and chapter 1), Steiner does two things for the reader. First, he elaborates on a diverse set of ideas contributing to the understanding of a "new human ecology." The principal idea of a "new ecology" was established by Daniel Botkin in his 1990 book *Discordant Harmonies: A New Ecology for the Twenty-first Century*. Botkin explained a new view of nature as dynamic, uncertain, and inclusive of human culture. Whereas Botkin developed the new ecology from the perspective of a biologist, Steiner has approached the new ecology from the perspective of a social scientist (I find the two books to be wonderfully complementary, both written in a style that is accessible to scholars, students, and even much of the public). Beginning with the idea of the new ecology established in Botkin's book, Steiner adds a diverse set of cultural ideas to develop the new human ecology. These include

advances in technology [particularly Geographic Information System and remote sensing], the study of urban morphology, the evolution of landscape studies in the humanities, social criticism, the emergence of the science of landscape ecology, a broader understanding of chaos theory, and increased interest in issues of sustainability. (P. 4)

Second, Steiner integrates these ideas to develop eight fundamental concepts for human ecology: systems thinking; language, culture, and technology; structure, function, and

change; edges, boundaries, and ecotones; interaction, integration, and institution; diversity; adaptation; and holism. Steiner's description creates a loose operational definition for human ecology that provides both an empirical and normative "lens" for work in human ecology.

In the remaining seven chapters, Steiner moves across societal scales, beginning with human habitats and ending with the global system, to describe the past and present and envision a future through the eight fundamental concepts of human ecology that he has established. Steiner justifies this hierarchical scale approach as "convenient" because it is conceptually consistent with biological (e.g., cell, organism, biome) and social (e.g., household, community, region) science norms. I agree with this approach, but while Steiner addresses cross-scale issues at times in the book, his chapter introductions and conclusions should have examined more closely the transitions to the next scale.

His goals in the book are "first, to bring together the scholarship from the social and natural sciences as well as the environmental design arts on this topic, and, then, to show how we might use that knowledge to envision our futures" (p. 16). Steiner accomplishes his first goal, but he falls short of the second. This is not a "how-to" book, nor is it a book with clear prescriptions for incorporating human ecology into the planning and design professions. For example, in one chapter Steiner weaves together various ideas about such things as ecology, computing technology, urban form, public discourse, and ecological footprints to examine the meaning of "community." But there is no clear vision for the future of community that emerges from this examination. Nevertheless, this is not a shortcoming because the reader should take Steiner's analysis and description to incorporate into their own normative frameworks; I think this is the key to reading the book.

The book is so full of information and narration that it surely will be of different value to different readers. Steiner regularly follows threads of ideas off his main topic, which is sure to frustrate some readers. I eventually became accustomed to his style and began to see the value of a less formal structure in allowing him to explore human ecology in a very personal way.

I principally took three things from Steiner's book, and I thank him for these new questions and insights. The first thing I took from Steiner's book is a new appreciation for the power of observation. Much of the analytic work in the book is inspired by observations he made of landscapes visited during his extensive travels. Steiner refreshingly ignores debates about the postmodern abyss by stating that we should learn to "trust what we see" (p. 172). And, by example, he provides an approach for examining what we see through the lens of human ecology.

The second thing I took from Steiner's book is insight into the value of diversity and contradiction that recasts my previous thoughts on the subject inspired from diverse sources such as Botkin's (1990) analysis of natural resource management and Sandercock's (1998) analysis of "insurgent" planning practices. Steiner explores the theory of the value of biological diversity and its relevance for unity and health of pluralistic societies. He examines the concept of ecotones, or the boundaries between ecosystems, as places of contradiction that flourish. And he suggests that the lesson of unity in diversity from ecology indicates that "perhaps we should advocate both dispersion and density" for our cities (p. 59).

The third thing I took from Steiner's book is a better understanding of the role of culture in defining the human organism's relationship with the environment. He beautifully describes the relationship in a traditional Dubai-style house (United Arab Emirates) between house design and activity of the occupants in reaction to the daily and seasonal rhythms of the climate. Whereas culture is typically considered to be the trait of our species that separates us from nature, Steiner effectively shows that culture is a necessary trait for integrating with nature. He states, "Culture provides mechanisms to help us organize the complexity that surrounds us" (p. 20).

In the last pages of the book, Steiner describes a cab ride in Rome that enhances knowledge of human ecology. This "synthetic ordinary experience," a moment created by a practical need to go from one place to another, is transformed by Steiner's prose. The observations about the cab driver, the river, the traffic, the buildings, and even the hanging laundry explain nothing about human ecology and everything about how to realize human ecology. If only we could all slow down more often to see what the world can teach us.

► References

- Botkin, Daniel B. 1990. *Discordant harmonies: A new ecology for the twenty-first century*. New York: Oxford University Press.
- Sandercock, Leonie. 1998. *Towards cosmopolis*. Chichester, UK: Wiley.